

REMARKS

The specification has been amended as requested by the Examiner. Claim 1 has been rewritten to overcome the rejection of claims 1-7 under 35 U.S.C. §112, second paragraph.

Claims 1-7 were rejected under 35 U.S.C. §102(b) as being anticipated by Yamasaki et al., U.S. Patent No. 5,885,747.

The present invention aims at improving the production yield of electron beam exposure masks, and an electron beam exposure mask is characterized by comprising a main mask having a plurality of first defined masks and “one or more compensation masks including one or more non-defective second defined masks each having a pattern configuration which is intended to be formed within a defective first defined mask among said plurality of first defined masks”, (claim 1, as amended).

An electron beam exposure mask having this structure can be determined as a non-defective mask, even when there is a defect in one of the plurality of divisional masks which form the main mask, as long as the compensation mask includes a non-defective divisional mask having a pattern configuration which is intended to be formed within the defective divisional mask, since the divisional mask included in the compensation mask substitutes the defective divisional mask which is included in the main mask.

Hence, as compared with an electron beam exposure mask which is formed only by a main mask, the production yield of masks can be improved. In the case of an electron beam exposure mask which is formed only by a main mask, unless all divisional masks are free of defects, the electron beam exposure mask cannot be determined as a non-defective mask.

On the other hand, Yamasaki et al. discloses providing auxiliary patterns on the four corners of a desired pattern and executing thinning of the desired pattern independently of thinning of the auxiliary patterns, in an effort to reduce the optical proximity effect and form a resist pattern as designed. Use of this structure prevents thinning of the desired pattern from eliminating the auxiliary patterns.

Although Yamasaki et al. discloses that the auxiliary patterns are formed on the four corners of the desired pattern, Yamasaki et al. does not disclose the feature of the present invention, i.e. a compensation mask which comprises “one or more non-defective second defined masks each having a pattern configuration which is intended to be formed within a defective first defined mask among said plurality of first defined masks”, (claim 1, as amended).

Yamasaki et al. fails to recognize the technical challenge of improving the production yield of masks, which the present invention aims at achieving, and hence, Yamasaki et al., provides no motivation to dispose a compensation mask which comprises a divisional mask which can substitute for a divisional mask included in a main mask which is a feature of the present invention.

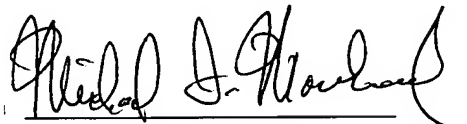
CLOSING

An earnest effort has been made to be fully responsive to the Examiner's objections. In view of the above amendments and remarks, it is believed that independent claim 1 is in condition for allowance, as well as those claims dependent therefrom. Passage of this case to allowance is earnestly solicited.

However, if for any reason the Examiner should consider this application not to be in condition for allowance, he is respectfully requested to telephone the undersigned attorney at the number listed below prior to issuing a further Action.

Any fee due with this paper, not fully covered by an enclosed check, may be charged on Deposit Account 50-1290.

Respectfully submitted,



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Enclosure: Amended Fig. 7

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FIG. 7

